ACTIA®

Vehicle Electronics & Diagnostics

User Guide

Pocket
Mobile
Master 10”
Master 12”
Master 12” Evo

Multi-Diag®

www.multidiag.com

CONTENTS

ACTIA®
Vehicle Electronics & Diagnostics

You have just purchased a Multi-Diag diagnostic tool and we thank you for your trust.

To help you familiarise yourself quickly and easily with the product, this user guide introduces you to all the functions of your new equipment… Just let us walk you through.

Developed by ACTIA, a major player in the field of vehicle diagnostic in Europe, the Multi-Diag range accompanies you daily through all car maintenance and repair operations.

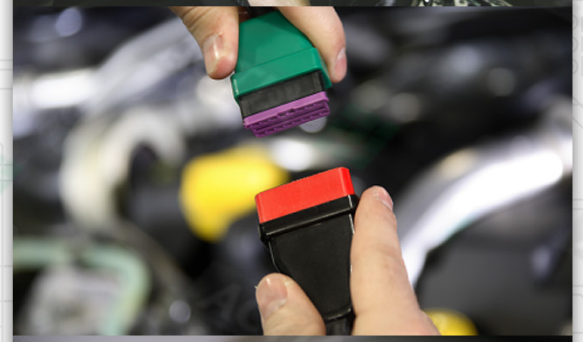
- Resetting of maintenance indicators
- Reading / Deletion of DTC's
- Reading of parameters (graphic representation)
- Testing of actuators
- ECU configuration
- Coding (injectors, electronic valves…)

Multi-Diag offers you fully innovative functions, giving you a head start whenever you are performing maintenance work on a vehicle.

- A Workshop mode and an Expert mode
- An Express Diag function
- The diagnostic report
- An Interface with the technical databases, etc.

The whole ACTIA expertise in a multi-make diagnostic device.

ACTIA®
Vehicle Electronics & Diagnostics



ACTIA: our commitments and guarantees

Over 20 years' partnership with vehicle manufacturers: a unique expertise.

Thanks to their expertise in the electronic architecture of vehicles, ACTIA devised the diagnostic in 1985. Since then, ACTIA have been the diagnostic partner of major manufacturers, and provide network support throughout the world. This know-how we have shown in our dealings with manufacturers is a unique guarantee in the world of multi-make diagnostic, and one of the keys to the success of Multi-Diag. As a result, ACTIA is working at the very heart of all technological and regulations issues in diagnostic, and can anticipate many developments. Today, over 20,000 users of the Multi-Diag range benefit from the ACTIA expertise.

In the field, to help you build the workshop of the future

With the takeover in 2003 of MULLER BEM – a benchmark in garage equipment and technical inspection – the ACTIA group offers to their customer a package deal in garage equipment – wheel check, anti-pollution devices, test benches, vehicle lifts… Moreover, their in-depth knowledge of the garage environment enables ACTIA to develop diagnostic tools which are perfectly suited to requirements in the field: performance, ergonomics, mobility, communication… while anticipating the garage of the future.

Multi-Diag equipment and services: the ACTIA trademark quality

With Multi-Diag, you benefit from the same quality of service as manufacturers' after-sales networks throughout the world: regular upgrades, assistance, training and support…

All ACTIA devices are developed in the group's design offices and manufactured in the group's factories, which are international benchmarks in the area of PCB production and assembly of complex systems for the automotive and aeronautics sector.

ACTIA®
Vehicle Electronics & Diagnostics

Diagnostic stations

Further details on page 12

Multi-Diag Master

12” Evo

12”

10”

or

Multi-Diag Mobile

or

Multi-Diag Pocket

or

Other diagnostic stations

Vehicle Communication Interface (VCI)

Further details on page 06

VCI 1 wire

or

VCI 2 wire

or

VCI 2 Bluetooth

Software

Further details on page 24

Multi-Diag software suite including the various diagnostic applications.

Description

This interface between the diagnostic tool and the vehicle being examined is used for communication with on-board systems.
It is connected:

- to the vehicle via a vehicle diagnostic cable
- to the tool via the communication interface in wire mode (USB or RS232 port) or in Bluetooth mode.

VCI 1 - With wire

- 1 VCI unit with wire connection via USB or RS232 cable
- 1 diagnostic cable for connection to the vehicle

*Compliant with standard **SAE J2534 -1, -2 (Pass-thru)** and therefore meeting **EURO 5** requirements*

VCI 2 - Bluetooth

- 1 VCI unit with wireless connection (Bluetooth)
- 1 cable for connection in wire mode to the USB port
- 1 diagnostic cable for connection to the vehicle

*Compliant with standard **SAE J2534 -1, -2 (Pass-thru)** and therefore meeting **EURO 5** requirements*

VCI 2 - With wire

- 1 VCI unit with wire connection via USB or RS232 cable
- 1 diagnostic cable for connection to the vehicle

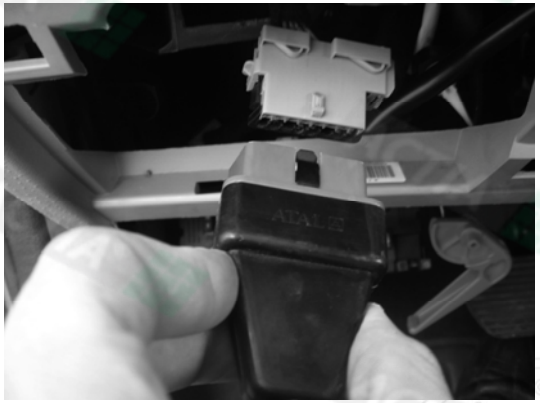
*Compliant with standard **SAE J2534 -1, -2 (Pass-thru)** and therefore meeting **EURO 5** requirements*

Connection

Step 1

- Connect the OBD cable to the VCI (25-pin connector).

Step 2



- Locate the diagnostic plug on your vehicle. Refer to ***page 36*** in this guide.
- Connect the diagnostic cable to the vehicle. If an adapter is required, refer to ***page 8***.

Step 3

- Connect the VCI to your diagnostic station:
  - VCI with wire: directly connect the port cable of your tool.
  - VCI Bluetooth: follow the Bluetooth connection procedure described on ***page 26***.

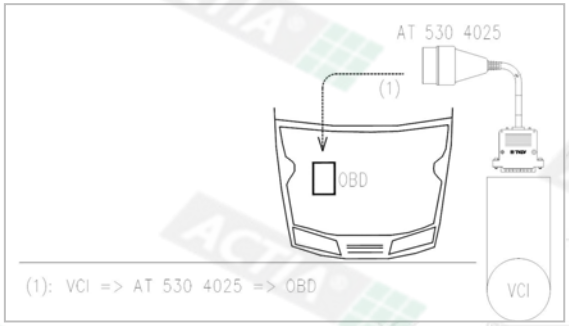
Multi-Diag®

In order to ensure compatibility with the greatest possible number of manufacturers, we offer a full range of cables, available from our commercial network.

OBD

AT530 4010 or
AT530 4025

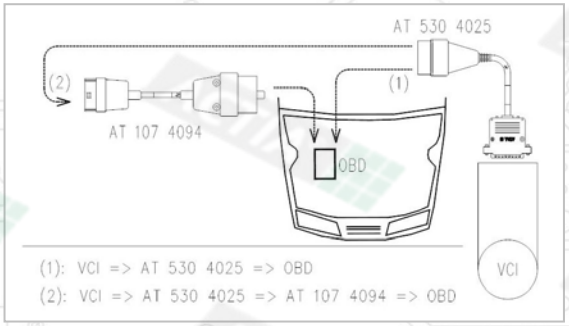
Ref. AC911776



BMW

AT107 4083 or
AT107 4094

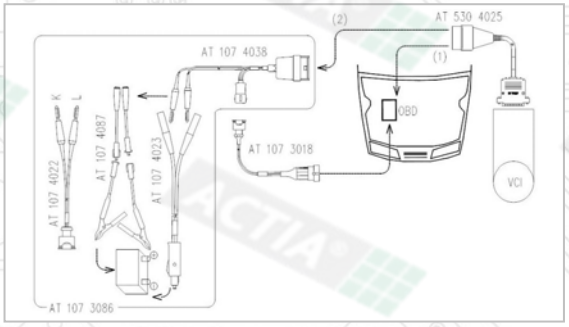
Ref. AC911801



FIAT – AUTOBIANCHI ALFA ROMEO – LANCIA

AT1073018

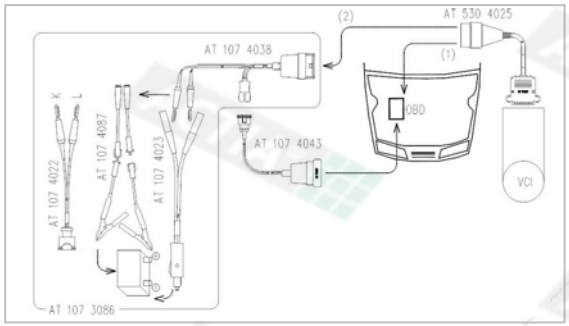
Ref. AC911786



LADA

AT107 4043

Ref. AC911785



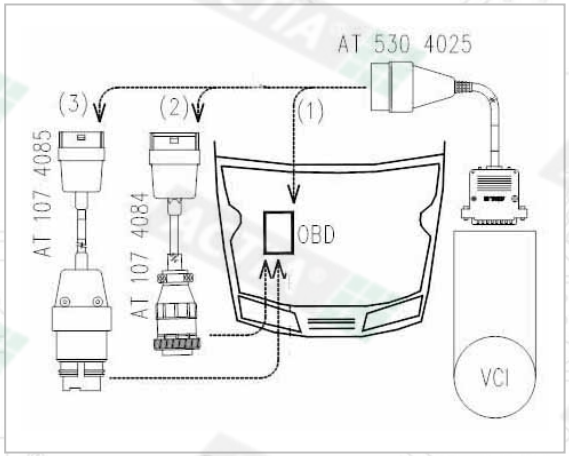
MERCEDES

AT107 4084

Ref. AC911850

AT107 4085

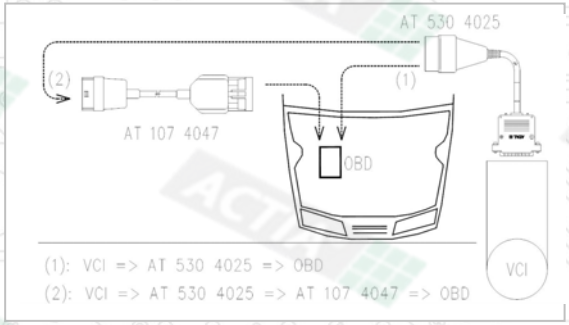
Ref. AC911851



OPEL

AT107 4047

Ref. AC911782



VOLKSWAGEN SKODA – SEAT - AUDI

AT107 4049

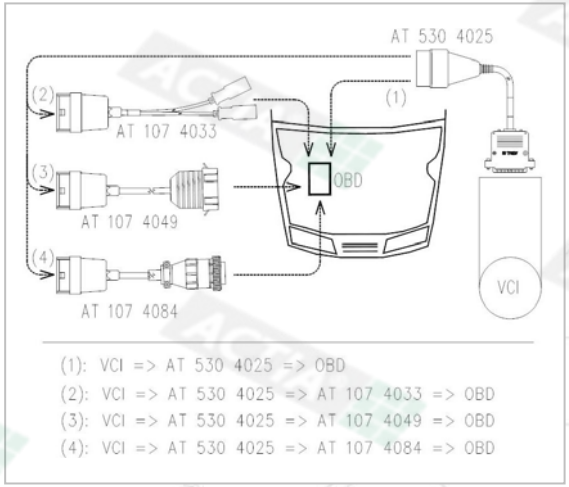
Ref. AC911779

AT107 4033

Ref. AC911777

AT107 4084

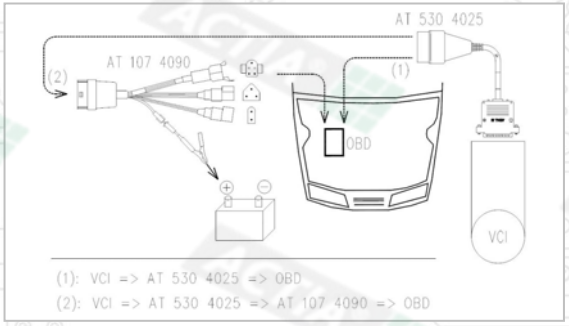
Ref. AC911850



FORD

AT107 4090

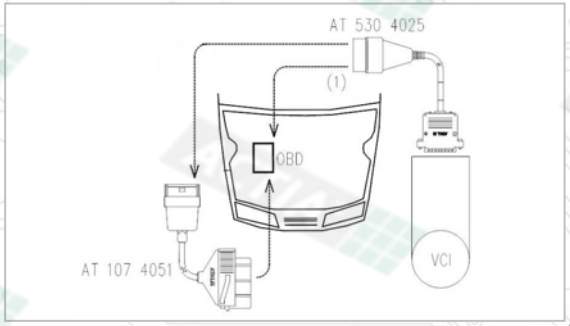
Ref. AC911708



PEUGEOT - CITROËN

AT107 4051

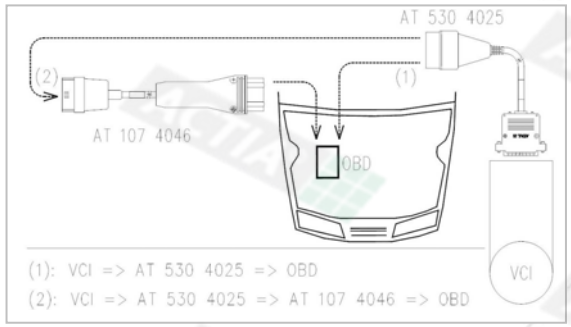
Ref. AC911781



RENAULT

AT107 4046

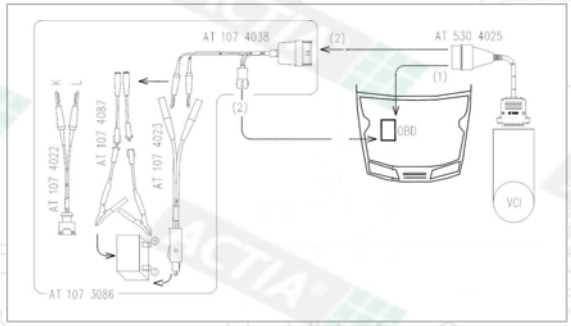
Ref. AC911780



Universal Connection Parts

AT1073086

Ref. AC911778



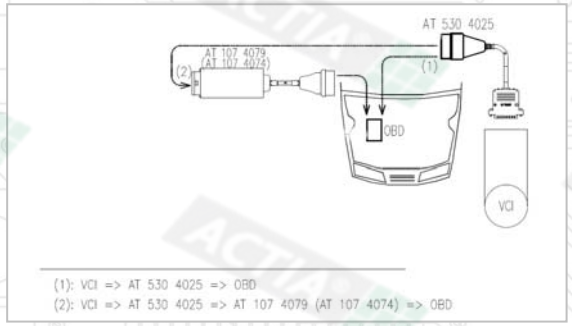
Universal Connection Parts

OBD1 Mux

Ref. AC965401

The OBD 1 Mux cable is used to perform common operations on the following systems:

- Ford MS CAN
- Peugeot / Citroën CAN
- Land Rover, suspension functions
- Opel: MS CAN
- Fiat: LS CAN (Grande Punto)



Multi-Diag Master 10''

The ACTIA diagnostic tablet combines the advantages of a robust professional tool with those of a graphic tablet with touch screen.

Technical characteristics

Screen	Touch colour 10" XGA TFT with reinforcing parts - shock absorption system
Processor	400 Mhz Celeron, low consumption technology
Random Access Memory	128 Mb RAM
Hard disk	20 Gb, mounted on shock absorption system
Drive	CD-ROM
Platform	Windows XP, open (possibility of adding other software)
Network and wireless connection	Ethernet

1 Indicator light

This indicator is lit when the tablet is switched ON:
- **green**, the tablet is powered by an external supply (vehicle or mains).
- **orange**, the tablet is powered by the internal battery.

2 ON/OFF button

If the tablet is OFF, keep the button pressed:
- **1 beep** switches the tablet ON.
- **2 beeps** forces charging of the battery by the mains supply.

If the tablet is ON, keep the button pressed:
- **1 beep** switches the tablet OFF.
- **2 beeps** restart the tablet.

Keeping the button pressed for longer than two beeps causes a long beep, no action is launched.

3 Battery charge indicator

- OFF battery charge level is between 35% and 99%.
- **green**, battery charge is 100%.
- **red**, slow flashing, battery charge < 35%.
- **red**, fast flashing + sound signal, battery charge very low.
  Switch to an external power supply or switch OFF the tablet correctly.
- steady **red** , the battery is missing or defective.

Battery charging

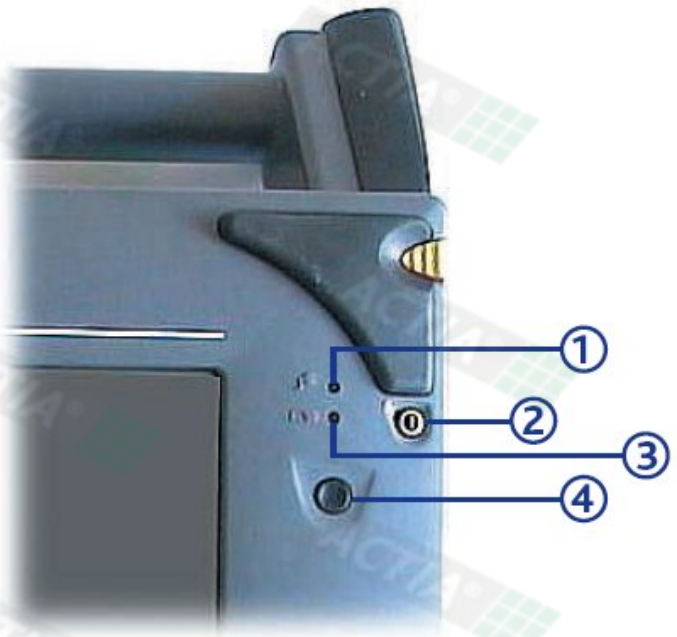
- The indicator light is flashing green, battery is charging.
- The indicator is steady green, the battery is charged to 100%.

1 Indicator light

2 ON/OFF button

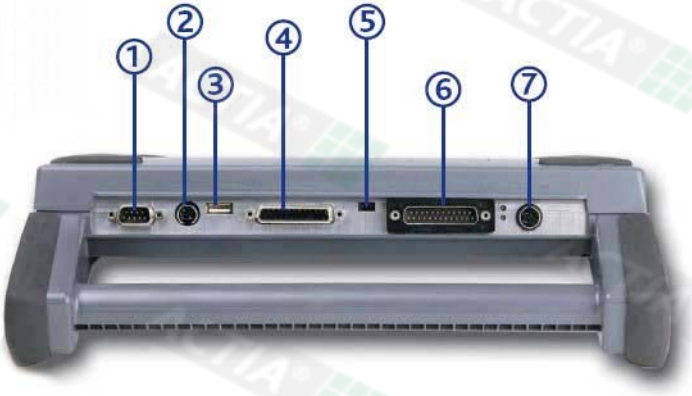
3 Battery charge indicator

4 Equivalent to mouse right click



Multi-Diag®

Ports



1. Serial cable (COM1)
2. Keyboard
3. USB
4. Parallel cable (LPT1)
5. Mains AC/DC Power Transformer
6. Not used
7. Vehicle Battery 12 V Power Cable

Battery replacement

- The tablet must be switched OFF.
- Remove the battery cover (unscrew the two screws and pull open the cover).
- Change the battery and refit the cover (secure the two screws).

Multi-Diag Master 12'' and 12'' Evo

This latest-generation ACTIA diagnostic tablet, ergonomic and upgradable, combines the advantages of a robust, heavy-duty professional tool, with those of a graphic tablet with touch-sensitive screen.

Technical characteristics

	Master 12''	Master 12'' Evo
Screen	Touch colour 12''1 XGA TFT (1024x768) with reinforcing parts - Shock absorption system	
Processor	600 Mhz Celeron, low consumption technology	1 Ghz Celeron, low consumption technology
Random Access Memory	512 Mb RAM	1 Gb RAM
Hard disk	60 Gb, mounted on shock absorption system	60 Gb, mounted on shock absorption system
Drive	Combo DVD/CD burner	Combo DVD/CD burner
Platform	Windows XP, open (possibility of adding other software)	Windows XP, open (possibility of adding other software)
Network and wireless connection	Ethernet/Bluetooth	Ethernet/Wifi/Bluetooth
Battery	7.4 V / 8 Ah	7.4 V / 9.6 Ah
Dimensions	350 x 330 x 100 mm	
Weight	4.2 Kg	

Multi-Diag®

1 Indicator light

This indicator is lit up when the tablet is switched on:
- **green**, the tablet is powered by an external supply (vehicle or mains).
- **orange**, the tablet is powered by the internal battery.

2 ON/OFF button

If the tablet is OFF, keep the button pressed:
- **1 beep** switches the tablet ON.
- **2 beeps** forces charging of the battery by the mains supply.

If the tablet is ON, keep the button pressed:
- **1 beep** switches the tablet OFF.
- **2 beeps** restart the tablet.

Keeping the button pressed for longer than 3 beeps causes a long beep, no action is launched.

3 Battery charge indicator

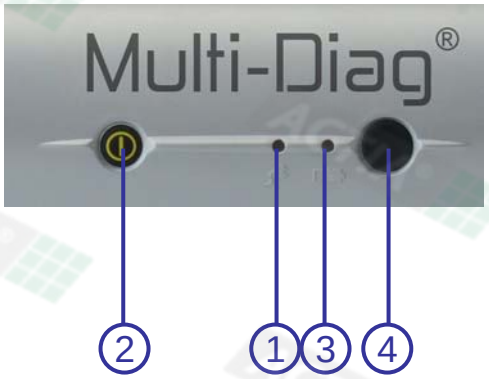
- OFF battery charge level is between 35% and 99%.
- **green**, battery charge is 100%.
- **red**, slow flashing, battery charge < 35%.
- **red**, fast flashing + sound signal, battery charge very low.
  Switch to an external power supply or switch OFF the tablet correctly.
- steady **red** , the battery is missing or defective.

1 Indicator light

2 ON/OFF button

3 Battery charge indicator

4 Equivalent to mouse right click

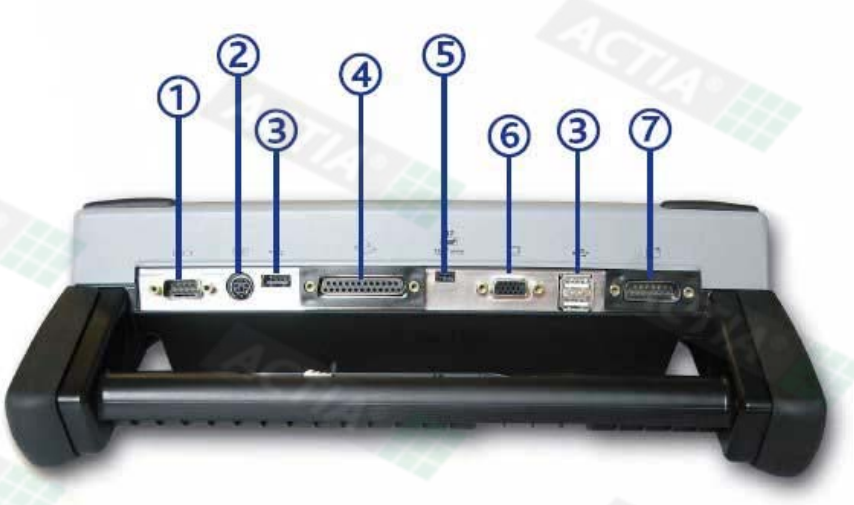


Battery charging

- The indicator light is flashing green, battery is charging.
- The indicator is steady green, the battery is charged to 100%.

Multi-Diag®

Ports



1. Serial cable (COM1)
2. Keyboard
3. USB in several locations
4. Parallel cable (LPT1)
5. Mains AC/DC Power Transformer
6. Not used
7. Vehicle Battery 12 V Power Cable

Battery replacement

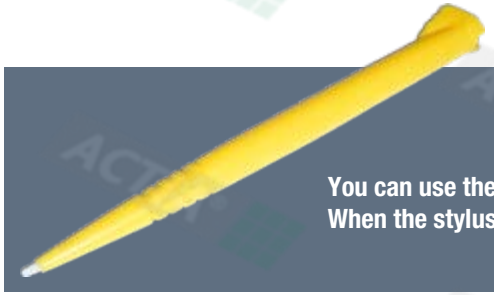
- The tablet must be OFF.
- Remove the battery cover (unscrew the two screws and pull open the cover).
- Change the battery and refit the cover (secure the two screws).

Multi-Diag Mobile

This latest-generation ACTIA diagnostic tablet, ergonomic and upgradable, combines the advantages of a robust, heavy-duty professional tool, with those of a graphic tablet with touch-sensitive screen.

Technical characteristics

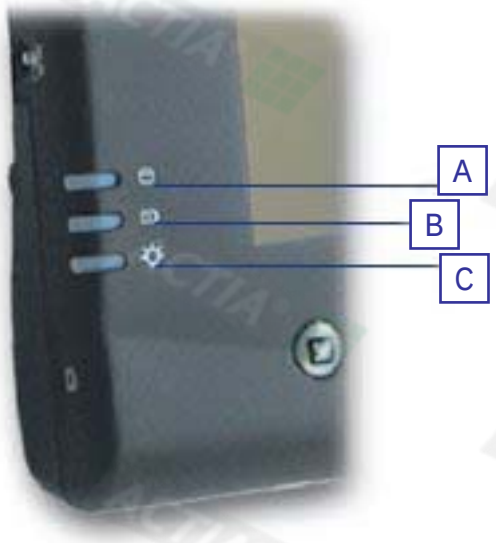
Screen	Touch colour 8.4''
Processor	Via EdenTM ESP 1 Ghz, ultra-low consumption technology
Random Access Memory	512 Mb RAM
Hard disk	40 Gb
Drive	External DVD drive to be connected to a USB port
Platform	Windows XP, open (possibility of adding other software packages)
Network and wireless connection	Ethernet, Wifi and Bluetooth



You can use the stylus to act directly on the touch-sensitive screen of your Multi-Diag Mobile.
When the stylus is pressed on the screen for a few seconds it performs the equivalent of a right-click.

Buttons and indicator lights

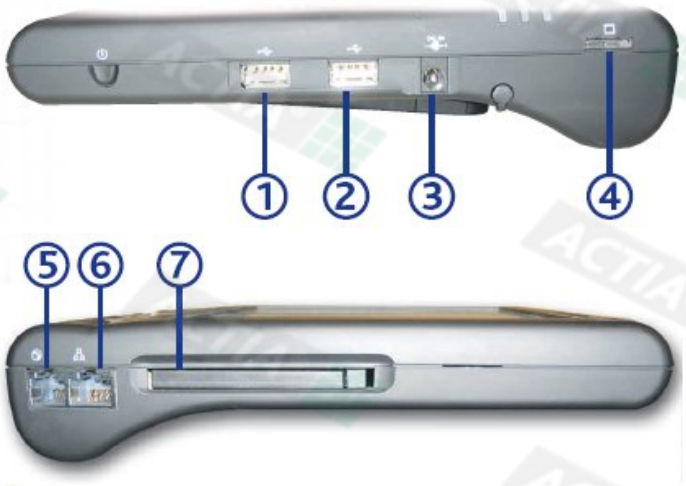
A Hard disk	Orange	Flasher light	Hard disk access in progress
B Battery	Green	OFF	Battery over 90% charged or operating on battery.
		ON	Battery on charge Charging may not necessarily start if the remaining charge in the battery is greater than 90%.
C Power supply	Blue	OFF	The tablet is OFF.
		ON	The tablet is ON.



1. Brightness adjustment
2. ON/OFF button
3. Command Buttons (not used)

Multi-Diag®

Ports



1. USB
2. USB
3. DC Power Supply
4. VGA Monitor Outlet
5. Modem (RJ11)
6. Network/Ethernet
7. PCMCIA

Battery replacement

- The tablet must be OFF.
- Slide the battery lock on the rear panel and pull the battery downwards.
- Insert the battery by sliding it into its housing.

Multi-Diag Pocket

This latest-generation ACTIA diagnostic tablet, superlight design, combines the advantages of an ultra-mobile Pc with those of a powerful pc.
Super slim you can make your job at the touch of a finger.

Technical characteristics

Screen	7'' wide Touch screen
Processor	Via 1,2 Ghz, ultra-low consumption technology
Random Access Memory	512 Mb RAM
Hard disk	30 Gb
Drive	External DVD drive to be connected to a USB port
Platform	Windows XP, close (any possibility of adding other software)
Network and wireless connection	Ethernet, Wifi and Bluetooth
Battery	11,1V / 2000 mA/h
Dimensions	192 mm x 125 mm x 32 mm
Weight	850g

Multi-Diag®

1 ON/OFF button

Press the button to turn on the Pocket

2 Indicator light

This indicator is lit up when the tablet is switched on:

- **green**, the tablet is in use

The indicator flashing indicates the CPu work is in progress.

3 Battery charge indicator

- **orange**, battery is charging

Multi-Diag®

Ports

1. USIM Card slot
2. Mini USB port
3. Expansion I/O port
4. USB 2 ports
5. Headphone Line out
6. Electrical socket

Installation

1

Insert the Multi-Diag DVD in your drive
to launch the installation of the Multi-Diag software.

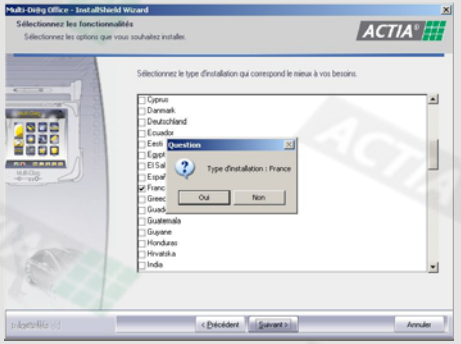
2

Read the licence contract displayed on the screen. Select
"I accept the terms of the licence contract".
Click on the **"Next"** button.

3

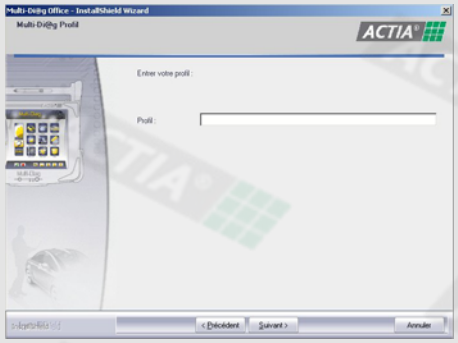
Select the installation language of your choice.
Click on the **"Next"** button.

4



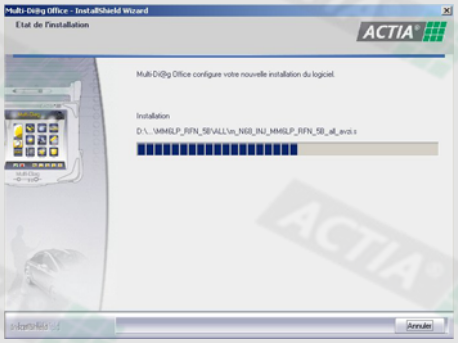
Validate the type of installation selected.

5



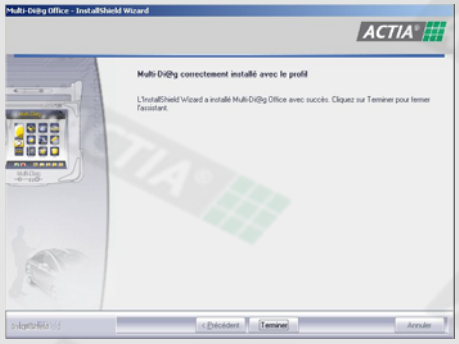
Enter your profile name.
If you do not have a specific profile, use the default one: **"ACTIA"**.
Click on the **"Next"** button.

6



The installation starts up.
Wait while the data are being downloaded.

7



Once the installation is completed,
click on the **"Close"** button to close the wizard.

Double-click on the icon located on the desktop
to launch the Multi-Diag software.

Navigation

Navigation toolbar

Keyboard button
Displays the digital keyboard

Documentation button
Quick access to the user guide, as well as to previous Multi-Diag News and other resources.

Configuration button
Access the menu used to change the parameters and settings of your Multi-Diag.

Internet upgrade button
Upgrade your tool using the Internet.

Diagnostic report button
View your latest diagnostic reports, as well as those you have archived.

Exit button
Exit the Multi-Diag application.

Other buttons for you to discover along the diagnostic process

Validate button
Validate your choice or select a function.

Cancel button
Answer a question in the negative and/or cancel an action in progress.

Back button
Go back.

Tip

The navigation toolbar is displayed on all screens in the software, do not hesitate to refer to it.

Configuration

VCI

The VCI configuration step is essential to the operation of your diagnostic tool.
You must therefore remember to configure your VCI before using it for the 1st time.

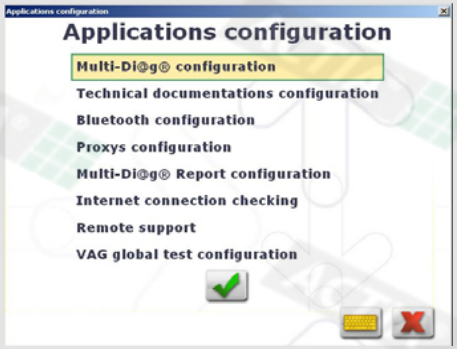
Tip

Remember to reconfigure your VCI if you replace it.

1

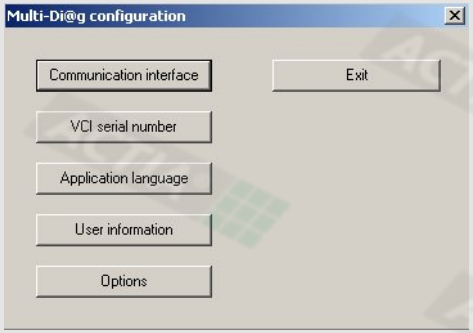
Click on the **"Configuration"** button in the navigation toolbar.

2



The **"Application configuration"** screen is displayed.
Select **"Multi-Diag Configuration"**.

3

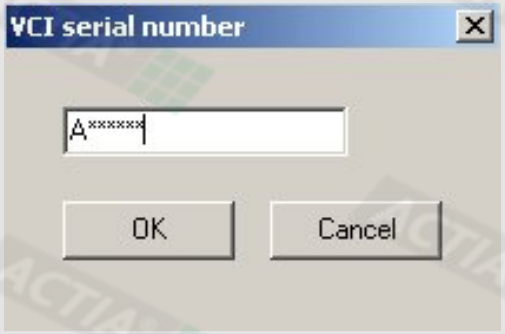


Click on the **« VCI Serial number"** button.

4

You will find
the VCI **serial number** to be entered at the back of the VCI (6 digits).

5



Enter your VCI number.

How to configure a Bluetooth VCI

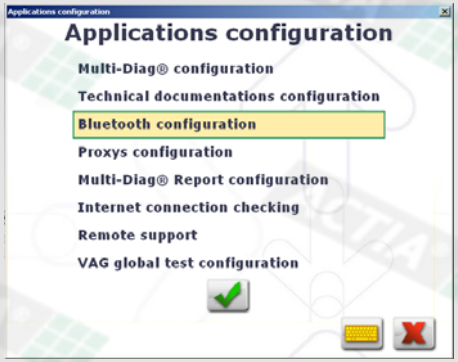
You must configure the Bluetooth link between the VCI and your diagnostic station in order to benefit from the wireless connection possibilities offered by the tool.

1st step	Check that your diagnostic station has a Bluetooth-type wireless connection. If such is not the case, you can use a Bluetooth antenna connected to a USB port. During the connection, your diagnostic station automatically recognises the Bluetooth device.
2nd step	Connect the VCI to the vehicle by using the OBD cable. The VCI is now powered up.
3rd step	Launch the configuration application to configure the Bluetooth link between your diagnostic station and the VCI. Follow the steps below.

1

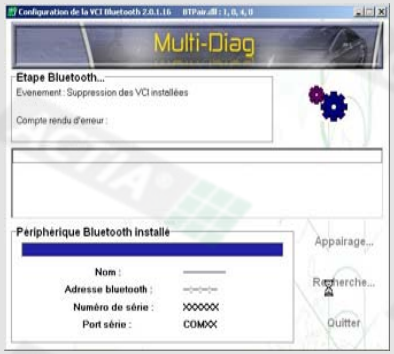
Click on the **"Configuration"** button in the navigation toolbar.

2



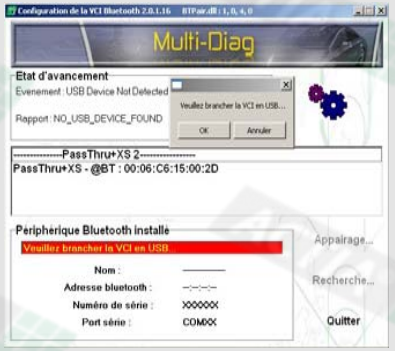
The **"Application configuration"** screen is displayed.
Select **"Bluetooth configuration"**.

3



Wait while the configuration application is being launched.

4

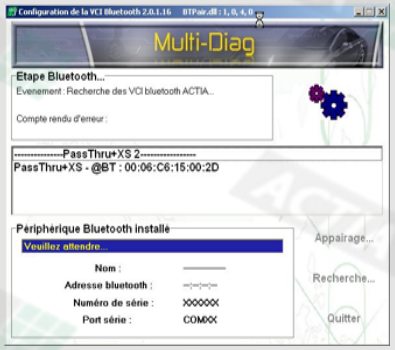


To continue with the configuration,
you must connect the VCI in USB wire mode.

5

Connect the VCI to your diagnostic station using the USB cable provided.

6



The VCI has been configured.
Click on the **"Exit"** button to exit the application.

Technical data

The Multi-Diag software allows you to create a link between your technical documentation (which includes a set of data for vehicle maintenance and repair) and your electronic diagnostic tool.

How to configure your technical documentation software

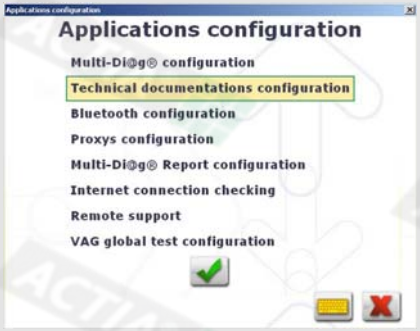
1

Install your technical documentation software (Autodata or VIVID, not included).

2

Click on the **"Configuration"** button in the navigation toolbar.

3



The **"Application configuration"** screen is displayed.
Select **"Technical documentation configuration"**.

4

Select the technical documentation database already incorporated into your tool (AutoData, Vivid).
Then click on the **"Validate"** button.
Your documentation interface has been installed.

How to look up the technical documentation database

In the course of a diagnostic, you will be offered a direct link to the data required for the diagnostic in progress.

1

Once the function has been chosen, select the **"Technical data"** tab.
Click on the technical documentation you wish to look up.

2

The selected electronic technical documentation
is immediately opened at the relevant chapter.

*You will also find in the **"Technical data"** tab links to a set of technical data (provided by ACTIA) associated with the diagnostic in progress.*

In the example above (Renault Mégane II), you have access to the configuration procedure for electro-pneumatic valves.

Diagnostic reports

A diagnostic report includes all the data recorded during a diagnostic.
The Multi-Diag software gives you the possibility of archiving these data and of looking them up at a later stage.

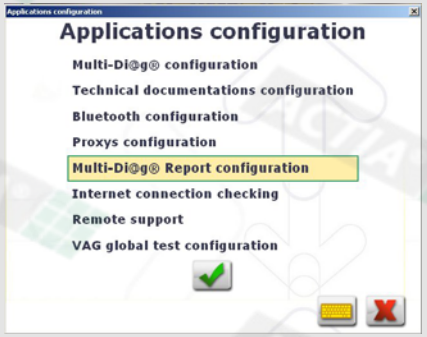
How to configure your diagnostic report

You can customise the diagnostic report by adding personal data.

1

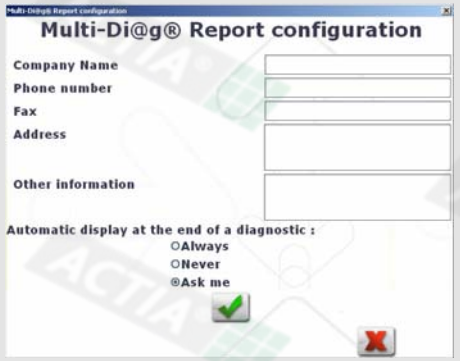
Click on the **"Configuration"** button in the navigation toolbar.

2



The **"Application configuration"** screen is displayed.
Select **"Multi-Diag Report Configuration"**.

3



Enter the information to be included in the report.

Tip

Add value to your service by customising the diagnostic report.

How to manage diagnostic reports

All diagnostics are stored in a "Diagnostic report" database. You can manage them according to your requirements.

1

Click on the **"Diagnostic report"** button in the navigation toolbar.

2

Select a diagnostic report in the list.
Double-click to access the detailed report.

Archive the report selected

Look up the archives

Permanently delete a report

You can print your report to keep a written record. You can also, at any time, provide your customer with this document, which lists all the tests performed in the course of the diagnostic.

3

Print your report.
You can either save it or delete it.

4

Example of printout of a customised diagnostic report.

Display the digital keyboard to enter customer-related information

Permanently delete a report

Print a report

Save a report

Exit the Multi-Diag application

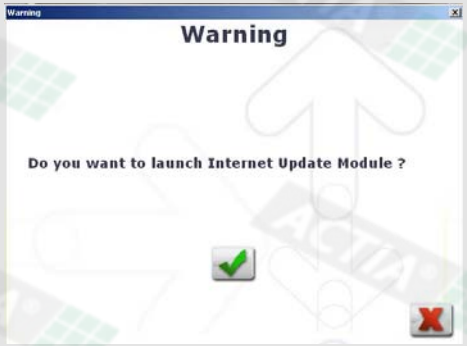
Internet upgrade

You can upgrade your tool via the Internet. To do this, you must have an Internet connection.

1

Click on the **"Internet upgrade"** button in the navigation toolbar.

2

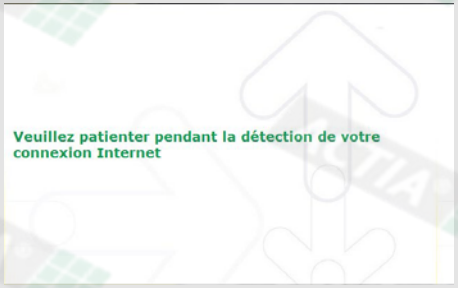


Click on the **"Validate"** button to continue.

3

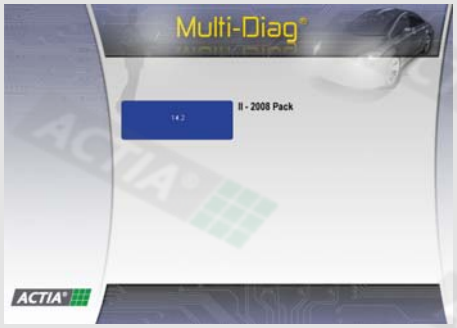
Click on the **"Validate"** button in the bottom right-hand corner to launch the Multi-Diag Update interface.

4



Wait while connection to the upgrade server is being established.

5



Select the upgrade you wish to install.

6

Wait while the data are being downloaded.

7

The download is completed.
Restart the Multi-Diag software in order to be able to use the new functions.

Diagnostic

Vehicle selection

The 1st step in the diagnostic consists in selecting the vehicle. You have a choice between three possibilities:

Entering the VIN identifier

1

Enter the vehicle VIN identifier.
Then click on the **"Validate"** button.

Automatic selection

1

Click on the **"Automatic vehicle selection"** button on the home screen.

2

Wait while the connection is being established.

3

Proceed with your diagnostic.

Manual selection

1

Select the make of the vehicle.

2

Select the vehicle model.

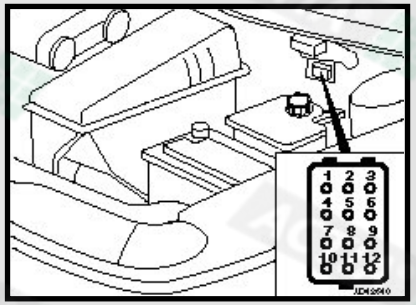
Localisation of the diagnostic socket

Once the vehicle has been selected, connect your tool to the diagnostic socket of your vehicle.
Multi-Diag proposes diagrams, photos and videos to help you locate the vehicle diagnostic socket.

1

Click on the Localisation icon.

2



View the location of the diagnostic socket using the diagrams, photos and videos available in the tool.

Workshop mode and Expert mode

Workshop mode

For quick repair or maintenance.
Direct access to the diagnostic applications classified according to activity (8 activity icons)

Expert mode

For a more in-depth repair or diagnostic.
Access to advanced functions, ECU by ECU

Tip

Activity in colour: available on this vehicle

Shaded activity: not available on this vehicle

Wheels and suspension:
Configuration of tyre size, work on electronic shock absorbers, configuration of electronic valves (DSG, SSP, etc.), calibration of the steering wheel angle sensor

Workshop mode

Maintenance:
Maintenance indicator reset, reading/deletion of defaults, Express Diag, etc.

Braking:
Diagnostic of ABS/ESP ECU's, locking/unlocking of electric brakes, purging of brake system, initialisation of slope sensor, etc.

Air conditioning:
Diagnostic of automatic air-conditioning systems, additional heating

Equipment:
Installation of after-sales products, alarm, radio, CD pack, coupling system,etc.

Anti-pollution and exhaust system:
Maintenance and replacement of the particle filter, lambda sensor, OBD test, anti-pollution diagnostic.

Expert mode:
Access to advanced functions, ECU by ECU

Body and windshield:
Airbag locking/unlocking, reverse radar, xenon headlights, rain sensor, airbag ECU

Engine:
Injection ECU, injector programming, automatic gearbox, EGR valve, etc.

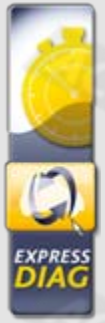
Expert mode

Express Diag

The Express Diag function allows you to perform a quick diagnostic over the whole vehicle.

With just one click, you can view all the DTC's for all ECU's in the vehicle.
An overview of the general electronic status of the vehicle is displayed on a single screen.
At the same time, the tool automatically generates a diagnostic report summarising the results of this test. You can print this report at any time, so as to keep a hard copy for archiving, or to have a supporting document to give to your customer.

1

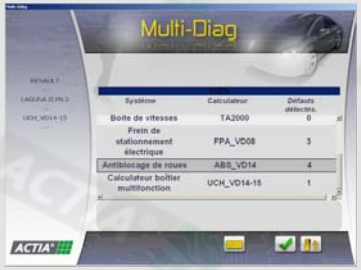


Click on the **"Express Diag"** icon.

2

Please wait while the tool scans all the ECU's.

3



Select the ECU of your choice.
Click on the **"Validate"** button.

4

A description of the defaults is displayed in a window.
Select them if necessary.
Use the **"Eraser"** tool in the navigation toolbar to erase them.

Express Diag in Expert mode

Read all DTC's on all ECU's in the vehicle.
Directly access all ECU functions (identification, reading and deletion of the default memory, reading of parameters, actuator testing, configuration, etc.).

Diagnostic applications

Below are a few examples of the applications most frequently used when selecting an ECU:

Identification

Obtaining information on the ECU:
Product reference / Supplier's name / Software version / VIN code / etc.

Reading of the default memory

Viewing the defaults present or stored on the ECU.
Default present = Permanent default
Stored default = Intermittent default.

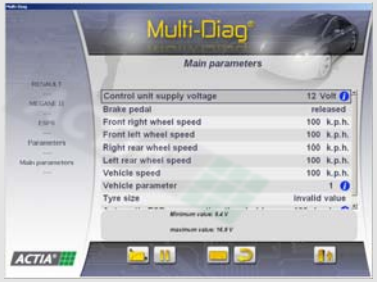
for more information, see p.40

Erasing DTC's

Delete all defaults present on the ECU.

for more information, see p.40

Parameters



View all parameters managed by the ECU.

for more information, see p.41

Actuators

Activate the actuators managed by the ECU.

for more information, see p.43

Configuration

Configure elements managed by the ECU.

for more information, see p.44

Reading of the default memory

You can view the DTC's present or stored on the ECU by using the **"Read the default memory"** function.

1

Select the ECU
of your choice.

2

Double-click on
"Read the default memory"
to view the defaults.

3

A new window is displayed,
showing the DTC,
the associated meaning, and the
default status (present or stored).
Select the default to be deleted.
Erase it by using the "Eraser" tool
in the navigation toolbar.

Erasing DTC's

You can immediately delete the DTC's present by using the **"Erase DTC's"** function.

1

Select the ECU of your choice.

2

Double-click on
"Erase defaults".

3

Click on the
"Validation" key in the
bottom right-hand corner to
confirm your choice. The
failure memory is then erased.

Parameters

You can view the data generated by all the sensors and processed by the ECU being questioned.

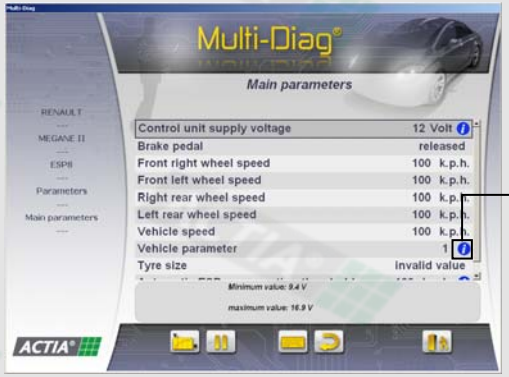
1

Once the ECU has been selected, the "Parameter" menu is displayed.

2

Select the group of parameters you wish to view.

3



The list of parameters is displayed.
The value measured in real time by the ECU is specified for each parameter.

This icon means that reference data are available
at the bottom of the page.
These data will help you understand the information displayed.

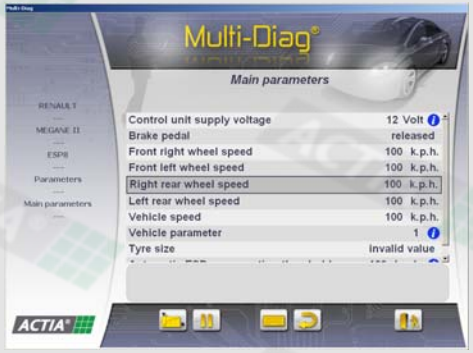
Graphic viewing of parameter data

Using this function, which is accessible from the "Parameters" menu, you can view the changes in value of the parameter in graphic mode along a time axis.

1

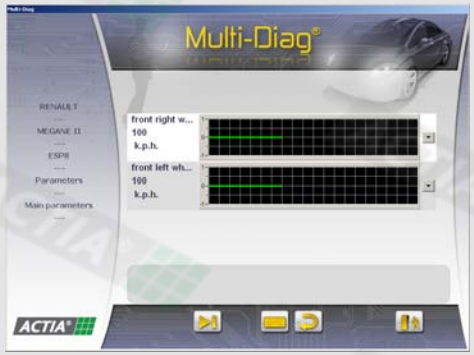
Click on the **"Graphics"** button in the navigation toolbar.

2



Select the parameters to be monitored (4 maximum).

3

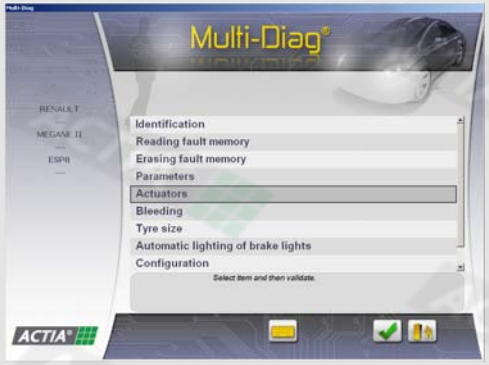


View the changes to your parameters over time (horizontal axis) and to the values of the parameter being monitored (vertical axis).

Actuators

This application enables you to test all the actuators managed by the ECU being questioned.

1



Select **"Actuators".**

2

In the list, select the actuator you wish to test.

3

Follow the instructions to perform the diagnostic.

4

The diagnostic is launched.

Configuration

This application enables you to configure the ECU's.

The example below provides an illustration of a change in tyre dimensions, requiring modification to the configuration of the ABS ECU.

1

Select the ECU (ABS), and then **"Tyre size"**.

2

Make your selection and click on the **"Validate"** button.

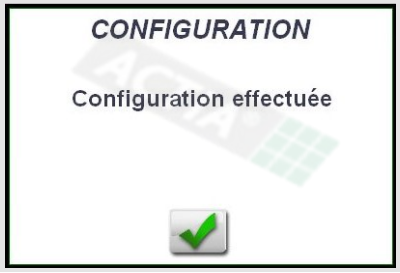
3

Make your selection and click on the**"Validate"** button.

4

Your selection is displayed. Click on the **"Confirmation"** button to confirm.

5



The change in configuration is confirmed in a window. Click on the **'Validate"** button.

Instructions for use

Preliminary remarks

- This tablet is for professional use only.
- The tablet must be used in compliance with ACTIA instructions.
- Power supply voltage 8 V to 16 V.

A supply voltage outside these limits may damage the tablet.

Environment

- Use the tablet at an ambient temperature of 0°C to 45°C for the Multi-Diag Master, and between 0°C to 35°C for the Multi-Diag Mobile.
- Protect the tablet from prolonged exposure to sunlight.
- Do not place the tablet near sources of flammable liquids to prevent any risks of explosion and fire.
- Do not use the tablet in the rain or on damp surfaces to prevent any risk of electric shock or damage to the tablet.
- Do not splash the tablet with liquids (water, acid, cleaning fluids, etc.).
- Do not leave the cables or peripherals near a source of heat or hot materials.

Handling

- Do not drop the tablet.
- Do not use peripherals (e.g. cables) other than those supplied by ACTIA.
- Do not install any software package other than those recommended by ACTIA.
- Avoid using the tablet for very long periods (several hours), since some parts of the tablet (I/O connector) may become very hot.
- Handling the tablet by the plastic parts to avoid burns.
- Do not allow the cables to run over the corner of tables, workbenches or shelves.
- Only use the stylus provided, in order to prevent damage to the touch-sensitive screen.
- Do not force the CD-ROM drive open (class 1 laser item), this could cause physical damages.
- Do not pull on the mains cable when unplugging the tablet from the power supply. Grip the connector when performing this operation.
- On road tests, secure the tablet using the vehicle's seat belts.
- The road test must not be conducted by the driver. Only a passenger must carry out the test.
- Do not place the tablet on an Airbag stowage location.The Airbag may be triggered.

Maintenance

In case of damages
- Do not use the tablet.
- Contact your retailer's After-Sales service.
- If the screen glass is broken, do not inhale, touch or ingest liquid crystals.

Glass splinters

Cleaning

- For external cleaning of the tablet, use a soft cloth impregnated with an suitable cleaning agent (cleaning agent for computer screen).

Do not use solvents

Batteries

Safety precautions
- Do not cause any short-circuits between the 3 battery terminals.
- Do not use the battery for any other applications (emission of a toxic substance and deterioration of the battery).
- Keep the battery away from any flammable sources.
- If the battery life drops, change the battery.
- Always replace the battery with a battery of the same type.
- Do not reverse the polarity of the battery.

Charging the battery

The battery must be charged using the mains adapter only. Do not use a standard charger.
Charge conditions: temperature between 10°C and 40°C for Multi-Diag Master, and between 10°C and 35°C for Multi-Diag Mobile.

The battery must be charged if:
- You have changed the battery and it is not charged.
- The charge indicator shows an insufficient autonomy (see chapter: Diagnostic stations).

To optimise battery performance, we recommend that you charge the battery to 100% (no partial charge) and only charge the battery when it is completely discharged.

Declaration of conformity

Multi-Diag®

Master 10''

Multi-Di@g® master 10" version

Manufacturer's name:	ACTIA®
Manufacturer's address:	25 Chemin de Pouvourville - 31432 TOULOUSE - France
Declares that the product:	
Product name:	Diagnostic PC tablet
Model number(s):	921407
Meets the following product specifications:	
EMC:	
EN50081- 1:	EN55022 1998
EN50082- 1:	EN61000- 4- 2: 1995 - 4KVCD, 8kV AD EN61000- 4- 3: 1997 - 3V/ m EN61000- 4- 4: 1995 - 0,5kV signal 5kHz

CE This product conforms to the terms of Directive 73/23 on low voltages and to EMC Directive 89/336 and has thus received the CE mark. (!)

Master 12''

Multi-Di@g® master 12" version

Manufacturer's name:	ACTIA®
Manufacturer's address:	25 Chemin de Pouvourville - 31432 TOULOUSE - France
Declares that the product:	
Product name:	Diagnostic PC tablet
Model number(s):	921519
Meets the following product specifications:	
CEM:	EN61326-1/A 1/A2 (Ed 97/98/01)
RTTE:	EN301489-1 (V1.4.1) EN301489-17 (V1.2.1) EN300328 (V1.4.1)
Low voltage:	EN60950-1 (Ed2001)

CE This product conforms to the terms of EMC Directive 89/336, to RTTE directive 1999/5, and to the low voltage directive 73/23 and has thus received the CE mark (!)

Additional information:
These are class A products.
In a domestic environment, these products can cause radio interferences which may require the user to take appropriate action.

Warning:
The product must not be used in an explosive environment.

This equipment operates on the 2.4 Ghz radio band, and may be used anywhere in the European Union. Usage outside the EU may be limited to certain frequencies, or require a user licence. Please contact the local authorities for further details.

Master 12'' Evo

Multi-Di@g® master 12" version

Manufacturer's name: ACTIA®

Manufacturer's address: 25 Chemin de Pouvourville - 31432 TOULOUSE - France

Declares that the product:

Product name: Diagnostic PC tablet

Model number(s): 921519

Meets the following product specifications:

CEM: EN61326-1/A 1/A2 (Ed 97/98/01)

RTTE: EN301489-1 (V1.4.1)
EN301489-17 (V1.2.1)
EN300328 (V1.4.1)

Low voltage: EN60950-1 (Ed2001)

CE This product conforms to the terms of EMC Directive 89/336, to RTTE directive 1999/5, and to the low voltage directive 73/23 and has thus received the CE mark (!)

This equipment operates on the 2.4 Ghz radio band, and may be used anywhere in the European Union. Usage outside the EU may be limited to certain frequencies, or require a user licence. Please contact the local authorities for further details.

Warning:
The product must not be used in an explosive environment.

Mobile

Multi-Di@g® mobile

To obtain a copy of the CE declaration, please contact:

Manufacturer's name: ACTIA®

Manufacturer's address: 25 Chemin de Pouvourville - 31432 TOULOUSE - France

CE This product conforms to the terms of EMC Directive 89/336, to RTTE directive 1999/5, and to the low voltage directive 73/23 and has thus received the CE mark. (!)

This equipment operates on the 2.4 Ghz radio band, and may be used anywhere in the European Union. Usage outside the EU may be limited to certain frequencies, or require a user licence. Please contact the local authorities for further details.

Pocket

This equipment operates on the 2.4 Ghz radio band, and may be used anywhere in the European Union. Usage outside the EU may be limited to certain frequencies, or require a user licence. Please contact the local authorities for further details.

Warning:
The product must not be used in an explosive environment.

Legal provisions

This tool is intended for informed professionals, who as such have, on the one hand, made their own decision to purchase, with no IT consulting service to be provided by ACTIA, who have no obligation towards them in this respect, and who on the other hand, accept the software and associated user guide as it is, without redress against ACTIA, either due to an apparent or hidden default, or to the decisions taken by the users based on its consequences, which come under their own competence and professional care, or to direct or consequential damages which may result from its use and operation.

The information in this document is liable to change.
The photographs and illustrations in these pages are not contractual.

Recycling

The packaging materials for this product are recyclable and can be reused.
All materials must be disposed of in accordance with local recycling rules.
When disposing of this device, be sure to comply with the law or local regulations.
Batteries must never be thrown away or incinerated, but disposed of in accordance with local regulations concerning chemical waste.
This product and the accessories packaged with it comply with the EEE directive, except for the batteries.

Multi-Diag®

Product references

	Master 10”	Master 12”	Master 12” Evo	Mobile	Mobile 2	Pocket
Diagnostic tablet	AC921407	AC921519	AC921802/004	AC600156	AC931496-A	AC600188
VCI	AC418038	AC418038	AC418040 (BT)	AC418038	AC418040 (BT)	AC418040(BT)
OBD cable	AC911776 (4m)	AC911776 (4m)	AC911776 (4m)	AC911776 (4m)	AC911776 (4m)	/
Power cable	AC540004 AC463038	AC540004 + AC565362	AC540004 AC565362	AC600171	/	/
Red battery clip cable	AC911107	AC911107	AC911107	/	/	/
Black battery clip cable	AC911108	AC911108	AC911108	/	/	/
Cigarette lighter power cable	AC9111001	AC9111001	AC9111001	AC600172 (Option)	/	/
Drive	CD AC600079	DVD COMBO AY14400102	DVD COMBO AY14400102	AY14400113	/	AY14400038
Plastic stylus	AC510638	AC511534	AC511255	AC511534	AC511534-C	AC511255
12 V battery power cable	AC911657	AC911679	/	/	/	/
Diagnostic tablet battery	AC424017		CO AC424024	AC600158	-	
Guarantee slip + Windows XPLicence	..... / AC525366	..... / AC525366	…….. / XP PRO AY44010005	…….. / AC525366	…….. / AC525366	AC424029
Battery instructions		AC521086		AC525366	AC521086	/
Protection cover	/	/	/	AC931496	AC931496-A	/